

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 02/10448A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04L1/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 31808 A (SICOM INC ;COCHRAN BRUCE A (US); LIEBETREU JOHN M (US); MCCALLISTE) 24 June 1999 (1999-06-24)  page 12, line 26 -page 13, line 7 ---	1-5,7, 9-12, 14-16, 19,24,26
A	US 4 908 827 A (GATES JOHN) 13 March 1990 (1990-03-13)  column 7, line 51 -column 8, line 7 figure 2B  --- -/--	1-5,7, 9-12, 14-16, 19,24,26

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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Date of the actual completion of the international search

18 December 2002

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30/12/2002

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 4 462 101 A (OGAWA AKIRA ET AL) 24 July 1984 (1984-07-24)</p> <p style="padding-left: 40px;">figure 3 column 5, line 34 - line 68 -----</p>	<p>1-5,7, 9-12, 14-16, 19,24,26</p>
A	<p>US 5 566 189 A (LASKOWSKI PAUL J) 15 October 1996 (1996-10-15)</p> <p style="padding-left: 40px;">abstract; figure 2 -----</p>	<p>1-5,7, 9-12, 14-16, 19,24,26</p>
A	<p>US 6 014 411 A (WANG CHARLES C) 11 January 2000 (2000-01-11) column 16, line 59 -column 17, line 4 -----</p>	<p>1-26</p>

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 02/10448

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9931808	A	24-06-1999	US 6005897 A AU 1921599 A AU 2200099 A US 6097764 A WO 9931808 A1 WO 9931809 A1	21-12-1999 05-07-1999 05-07-1999 01-08-2000 24-06-1999 24-06-1999
US 4908827	A	13-03-1990	NONE	
US 4462101	A	24-07-1984	JP 1460272 C JP 57155857 A JP 63007690 B FR 2502429 A1 GB 2095517 A , B	28-09-1988 27-09-1982 18-02-1988 24-09-1982 29-09-1982
US 5566189	A	15-10-1996	US 5790566 A	04-08-1998
US 6014411	A	11-01-2000	NONE	